INDEX TO VOLUME 45

New names and the final members of new combinations are in **bold face type.**

Abies balsamea, 37
Abrus precatorius, 277
Acacia Cavenia, 270; farnesiana, 276, 489; koa, 275
Acer pennsylvanicum, 37, 42; rubrum, 37; saccharum, 31, 37, 42, 205; spicatum, 38
Achillea Millefolium, 39
Achryanthus aspera, 277; obovata, 148; splendens, 274, 500; splendens rotundata, 274
Actaea alba, 31, 39; rubra, 207, 379
Actinostroma infundibuliformis, 461
Adiantum pedatum, 31, 94
Adenostegia, 400; Bolanderi, 406; Bolanderi capitata, 403, 404; ciliosa, 404; canescens, 419, 421; filifolia, 403, 410; **Hanseni**, 400, 403, 408; **Helleri**, 417; laxiflorus, 401; **littoralis**, 403, 413; Kingii, 416; mollis, 419; maritima, 420; Nevinii, 403, 409; Orcuttiana, 418; **palmata**, 419; Parryi, 421; **parviflora**, 403, 409; pilosa, 403, 405; Pringlei, 402; ramosa, 403, 414; rigida, 403, 411; rigida brevibracteata, 403, 412; tenuis, 403, 406; viscida, 400, 403, 407; Wrightii, 403
Adenostegia, Taxonomy and distribution of, 399
Aecidium **anthericicola**, 149; Atriplicis, 141; **Cyrillae**, 150; **conspicuum**, 153; Hyptidis, 454; **Keerliae**, 154; **Mozinnae** 152; myricatum, 291; **Pereziae**, 153; **plenum**, 149; ranunculacearum, 147; Rosae, 454; roseum, 154; **steviicola**, 154; **Thenardiae**, 150; **Tithymali**, 151; tucumanense, 454
Aegopogon, 154
Aethusa Cynapium, 56
Agrostemma Githago, 379
Aira caryophyllea, 369
Air chambers of Grimaldia fragrans, The, 235
Aleurites moluccana, 271, 276
Alisma subcordatum, 368
Alnus incana, 37
Alopecurus geniculatus, 369
Alsine graminea, 379
Ambrosia artemisiifolia, 40
Amelanchier canadensis, 292, 295; intermedia, 292, 294; nantucketensis, 380; oblongifolia, 381; sp., 33, 38; stolonifera, 381
Ammophila arenaria, 492
Amsinckia arenaria, 382; intermedia, 382
Anacardium occidentale, 271
Andromeda glaucophylla, 38, 42
Anthericum nanum, 149
Antidesma platyphyllum, 134
Apocynum androsaemifolium, 40; cannabinum, 40
Aralia nudicaulis, 38, 207; racemosa, 40
Arctium minus, 40
Arctostaphylos Uva-ursi, 33, 38, 382
Argemone intermedia, 150; mexicana, 276
Argyreia tiliaefolia, 275, 487, 489
Arisaema pusillum, 373
Aronia nigra, 38
ARTHUR, J. C. New species of Uredineae—X, 141
Asclepias incarnata, 39; syriaca, 39
Asarum canadense, 207
Aspidium aculeatum, 98; angulare, 98; auriculatum, 98, 99, 100; caryotideum, 98; chrysolobum, 98–100; falcatum, 97; Filix-mas, 97; Filix-mas cristatum, 98; Filix-mas genuinum, 98; hirtipes, 100–102; marginale, 207; spinulosum intermedium, 207; Tsus-Simense, 98, 100; varium, 99
Asplenium Filix-foemina, 365; nidus, 94
Aster macrophyllus, 40
Athyrium angustatum, 366; angustatum elatius, 366; angustatum rubellum, 366; asplenoides, 366
Atriplex, 271; confertifolia, 141; Nuttallii, 142; patula hastata, 492
Auricularia ampla, 456; corrugata, 455; lobata, 455; mesenterica, 451, 455; ornata, 455; phosphorea, 457; rugosissima, 456; sambucina, 457; tremelloides, 455; violacea, 455
Auriculareae, 455
Avena sativa, 55
Avicennia tomentosa, 270, 271
AVERY, B. T., HARRIS, J. A. &. Correlation of morphological variations in the seedling of Phaseolus vulgaris, 109

Barringtonia excelsa, 270; speciosa, 270

Batis maritima, 275, 487, 497
BERRY, E. W. Notes on the fern genus Clathropteris, 279
Betula lutea, 37, 204, 207; papyrifera, 37; populifolia, 375; pumila, 34, 38
BICKNELL, E. P. The ferns and flowering plants of Nantucket—XIX, 365
Bihai borinquena, 145; latispatha, 145
Bjerkandera adusta, 463
Blephariglottis ciliaris, 374
BOAS, H. M. The relationship between the number of sporophylls and the number of stamens and pistils—a criticism, 343
Boerhaavia diffusa, 275, 489 495, 500
Boletus abietinus, 466; isabellinus, 463; roseus, 465
Borrichia, 271
Botrychium Lunaria, 203; onondagense, 203; virginianum, 40
Bromus hordeaceus, 371; secalinus, 371; tectorum, 371
BROWN, E. W. Regeneration in Phegopteris polypodioides, 391
Bryum contortum, 445; extinctorium, 433, 437, 438, 441; pulvinatum, 433

Caeoma destruens, 452; exitiosum, 455; miniatum, 455; Rosae miniatum, 455
Caesalpinia Bonducella, 270, 271, 272, 276
Cakile, 271; edulenta, 492
Calamagrostis canadensis, 29, 38
Calophyllum inophyllum, 271, 275, 489
Caltha palustris, 40
Calystegia Soldanella, 270
Campanula rotundifolia, 58, 59, 62, 66; uliginosa, 40
Canavalia, 270, 271
Cannabis sativa, 378
Carapa moluccensis, 271; obovata, 271
Campylotheca molokaiensis, 274, 495
Capparis sandwichiana, 495, 500
Cardiospermum, 271; Halicacabum, 277
Carex arctata, 31, 39; filiformis, 29, 39; hirta, 372, Howei, 372; imcomperta, 372; laxiflora, 31; leptalea, 372; muricata, 372; sandwicensis, 276; stricta, 372; virescens, 372
Carpinus caroliniana, 375
Carrier of the mosaic disease, A, 219
Cassia Gaudichaudii, 275, 495
Cassytha filiformis, 272, 276
Castalia odorata, 379
Casuarina equisetifolia, 276
Celastrus scandens, 38
Cenchrus, 271; calyculatus, 276, 497, 500
Centrosema, 271
Cerbera Odollam, 270
Chaetochloa imberbis, 369; imberbis perennis, 369; occidentalis, 369; versicolor, 369
Chamaecyparis thyoides, 291
Chamaedaphne calyculata, 38
Chamaenerion angustifolium, 38
Chenopodium album, 276, 497; sandwicheum, 275, 500;
Chiococca, 271
Chiogenes, 36; hispidula, 39
Chloris, 271
Chloropyron canescens, 421; maritima, 420; palustre, 420; Parryi, 421
Chrysanthemum Leucanthemum, 39
Cichorium Intybus, 70
Cicuta bulbifera, 382
Cibotium Chamissoi, 134; Menziesii, 134
Cintractia affinis, 453; Krugiana, 453; leucoderma, 453
Circaea alpina, 40
Cissampelos Pariera, 270
Cladium leptostachyum, 276; mariscoides, 40
Cladoderris Blumeri, 461; elegans, 461; Decandolleana, 461; infundibuliformis, 461
Clarkia pulchella, 56
Clathropteris meniscioides, 280; platyphylla, 279, 280–285
Clavaria flagelliformis, 462
Clavarieae, 462
Clematis Drummondii, 146
Clermontia parviflora, 134
Clerodendron inerme, 270, 271
Clintonia borealis, 39
Coccoloba, 271
Cocos nucifera, 270, 271, 275
COKER, D. Revision of the North American species of Encalypta, 433
Coleosporium miniatum, 455
Colubrina asiatica, 270, 272, 274
Coltricia benguetensis, 464
Comandra umbellata, 40
Comarum palustre, 39
Comptonia asplenifolia, 291; peregrina, 38
Conocarpus erecta, 271
Conringia orientalis, 380
Convolvulus spithamaeus, 40, 271
Coptis trifolia, 39, 207, 379
Cora gyrolophia, 461; pavonia, 462
Cordea subcordata, 270, 271, 275
Cordylanthus bicolor, 404; capitatus, 404; canescens, 421; filifolius, 410, 411; filifolius brevibracteatus, 412; Kingii, 416; laxiflorus, 401; mollis, 419; maritimus, 420; Nevinii, 409; Orcuttianus, 418; Parryi, 421; pilosus, 405, 406; Pringlei, 402; ramosus, 414; rigidus, 411; tenuis, 406
Coriolopsis atypus, 464; melleoflavus, 463
Coriolus abietinus, 466; perpusillus, 466; rubritinctus, 466

Cornus canadensis, 39, 207; stolonifera, 38
Correlation of morphological variations in the seedling of Phaseolus vulgaris, 109
Corticium caeruleum, 451, 457
COUTANT, M. W. Wound periderm in certain cacti, 353
Crataegus chrysocarpa, 381; oxyacantha, 287
Crepidula plana, 53
Cressa cretica, 275, 487, 496
Crotolaria sp., 277
Crotonopsis argentea, 478, 479; elliptica, 478; linearis, 477, 478, 479; spinosa, 478, 479
Cudonia, 79
Cyanea arborea, 135; **Giffardii**, 133, 134; noli-me-tangere, 136; **rollandioides**, 135; superba, 134; tritomantha, 136
Cycas circinalis, 271
Cyclomyces spadiceus, 467; tabacinus, 467
Cycloporellus barbatus, 467
Cymatoderma elegans, 461
Cynodon Dactylon, 277
Cynoglossum officinale, 39
Cynometra cauliflora, 271
Cyperus laevigatus, 275, 497, 500; pennatus, 276, 500; pheloides, 276; umbellatus, 277
Cypripedium hirsutum, 40
Cyrilla racemiflora, 150
Crytomium Fortunei, 98; Rochfordianum, 98
Cystopteris bulbifera, 207
Cyrtandra, 134

Dalibarda repens, 207
Dammara australis, 272
Danthonia spicata, 39
Datura Stramonium, 219, 277; Tatula, 219
Decodon verticillatus, 38
Dennstaedtia punctilobula, 366
Derris uliginosa, 270
Dictyocalyx Miersii, 270
Diervilla Lonicera, 38, 207
Digitalis grandiflora, 56; purpurea, 56
Dioclea violacea, 272
DODGE, B. O. Studies in the genus Gymnosporangium—II. Report on cultures made in 1915 and 1916, 287
Dodonaea, 271; viscosa, 270
Dougaldea Hoopesii, 153
Draba verna, 56
Drosera filiformis, 380; intermedia, 380; rotundifolia, 380
Drynaria composita, 285; quercifolia, 285
Dryopteris spinulosa, 40; Thelypteris, 39
Dryostachyum, 285
Dubautia laxa, 138
Dulichium arundinaceum, 39

Elaeodendron, 271
Eleocharis palustris, 40; tricostata, 372
Elymus sp., 33, 40
Encalypta affinis, 440; alaskana, 433, 435, 441; alpina, 435, 437, 440; apophysata, 435, 437, 443; brevicolla, 437, 438, 444; ciliata, 435, 441; ciliata microstoma, 442; commutata, 441; contorta, 434, 436–438, 445; cucullata, 433, 435, 436, 438, 444; extinctoria, 434, 437, 438; extinctoria apiculata, 439; extinctoria mutica, 439; lacera, 434, 435; laciniata, 434, 437, 441; laciniata **microstoma**, 440, 442; leiomitra, 435, 439, 440; leiocarpa, 433, 435, 436, 443; labradorica, 434, 435, 436, 444; longipes, 433, 435, 436, 444; Macounii, 433, 435, 443; mexicana, 435, 441; pilifera, 440; procera, 435, 438, 444; rhabdocarpa, 435, 437, 439, 440; rhabdocarpa microstoma, 440; rhabdocarpa pilifera, 440; Selwyni, 433, 435, 436, 444; streptocarpa, 436, 445; subbrevicolla, 434, 436, 444; subspathulata, 434, 435, 439, 440; vulgaris, 435, 438
Encalypta, Revision of the North American species of, 433
Entada scandens, 271
Epigaea repens, 40
Equisetum arvense, 39, 366; fluviatile, 40; hyemale, 33, 39; laevigatum, 40; palustre, 39; scirpoides, 40
Eragrostis hawaiiensis, 276, 500
Eriophorum viridicarinatum, 40
Erodium cicutarium, 382
Erysibe miniata Rosarum, 455; panicorum, 452
Erysimum cheiranthoides, 380
Erythraea sabaeoides, 276
Erythrina monosperma, 275
Euchlaena luxurians, 318; mexicana, 318, 332
Eupatorium, 154; perfoliatum, 39; purpureum, 39, 154
Euphorbia, 271; Atoto, 270; cordata, 275, 487, 495, 496; pilulifera, 277
Euthamia sp., 40
Euxolus viridis, 277, 500
EVANS, A. W. The air chambers of Grimaldia fragrans, 235
Evolution of maize, The, 309
Excoecaria Agallocha, 271
Exidia ampla, 456; auricula-judae, 457; nobilis, 456; tenuis, 457

Fagus grandiflora, 37, 375
Ferns and flowering plants of Nantucket—XIX, The, 365

FERRIS, R. S. Taxonomy and distribution of Adenostegia, 399
Festuca capillata, 371; myuros, 371; octoflora, 371; ovina, 371
Ficus macrocarpus, 52
Filicites meniscioides, 280
Fimbristylis pycnocephala, 274, 489
Fleurya interrupta, 276
Fomes albomarginatus, 464; carneus, 466; cornu-bovis, 465; Fullageri, 465; melanoporus, 465; Merrillii, 465; pyrrhocreas, 464; roseus, 465; spadiceus, 467, 468; substygius, 467
Fraxinus americana, 37; nigra, 37
Friesia, 477; argentea, 479

Galium triflorum, 40
Gaultheria procumbens, 39
Geoglossum, 79; glabrum, 80; glutinosum, 80
Geranium mexicanum, 156; Robertianum, 31, 40
Glyceria Fernaldii, 370
Gossypium tomentosum, 274, 495
GRAFF, P. W. Philippine Basidiomycetes—III, 451
Grimmia, 433
Grimaldia dichotoma, 236
Grimaldia fragrans, The air chambers of, 235
Guettarda speciosa, 271
Gymnadeniopsis clavellata, 374
Gymnosporangium clavariaeforme, 292; clavipes, 287, 293, 296; Ellisii, 287, 291, 293; fraternum, 296; globosum, 287, 288, 290; juvenescens, 294; macropus, 287, 288; nidus-avis, 287, 293, 294; transformans, 296
Gyromitra esculenta, 79; gigas, 80, infula, 79

Hamaspora acutissima, 454
HARPER, E. T. Two remarkable Discomycetes, 77
HARPER, R. M. The plant population of northern lower Michigan and its environment, 23
HARRIS, J. A., & AVERY, B. T. Correlation of morphological variations in the seedling of Phaseolus vulgaris, 109
Helianthus petiolaris, 383
Heliotropium, 271; anomalum, 275; curassavicum, 270, 275, 500
Helvella crispa, 79, 80; elastica, 79, 85; mesenterica, 455
Heritiera littoralis, 270
Herpestis Monnieria, 275
Hibiscus, 271; Rosa-sinensis, 276; tiliaceus, 270, 271, 276
Hicoria alba, 375; glabra, 375; microcarpa, 375
Hirneola affinis, 456; ampla, 456; auricula-judae, 456; nobilis, 456; tenuis, 457
Hordeum jubatum, 372; vulgare, 372
Houstonia caerulea, 383
HUMBERT, E. P. A striking variation in Silene noctiflora, 157
Humulus Lupulus, 378
Hydneae, 463
Hydrocotyle verticillata, 277
Hymenochaete adusta, 457; cacao, 458; nigricans, 458; rheicolor, 458; tenuissima, 458
Hymenolichenes, 461
Hyoscyamus niger, 219
Hypericum opacum, 480
Hypoxis hirsuta, 374

Ilex verticillata, 38
Impatiens pallida, 207
Index to American botanical literature, 43, 87, 121, 159, 211, 253, 301, 347, 385, 425, 470, 503
Indigofera Anil, 277
Ipomoea, 271; acetosaefolia, 275; glaberrima, 272, 275, 496; grandiflora, 271; insularis, 275, 496, 500; maritima, 270; pes-caprae, 270, 272, 275, 500
Iris versicolor, 29, 39
Irpex flavus, 463

Jacquemontia sandwicensis, 276, 495, 497
Juncus balticus, 373
Juniperus communis, 292; virginiana, 288, 366

Kadua littoralis, 274, 489, 495, 496
Kalmia polifolia, 28
Keerlia mexicana, 154
Koellia incana, 383
Krameria glandulosa, 143
Kyllingia monocephala, 276

Labordia, 134
Laburnum vulgare, 382
Lachnea semitosta, 80
Lachnocladium flagelliforme, 462; usambarense, 462
Lactuca virosa, 383
Laguncularia racemosa, 270
Larix decidua, 366; laricina, 37, 42
Laschia velutina, 456
Lathyrus odoratus, 56; palustris, 39
Lechea Leggettii, 480
Ledum groenlandicum, 38
Leotia, 79
Leersia alpina, 441; ciliata, 441; contorta, 445; extinctoria, 438; extinctoria pilifera, 440; laciniata, 441; marginata, 438; rhabdocarpa, 439; procera, 444; Selwyni, 444; vulgaris, 438
Lemna minor, 373; trisulca, 373
Lens esculenta, 56

Lepidium owaihense, 274, 487, 495, 496, 500
Leptemon lineare, 479
Leptilon canadense, 39
Lepturus repens, 275, 500
Leucaena glauca, 276
Lilium philadelphicum, 39, 373
Linnaea americana, 39
Linum angustifolium, 59, 70; striatum, 382; usitatissimum, 70
Liparis Loeselii, 374
Lipochaeta connata littoralis, 274; integrifolia, 274, 495, 500; succulenta, 274, 496
Liriodendron-Tulipifera, 379
Lobelia cardinalis, 40; Erinus, 58, 59, 66; hypoleuca, 138; **oahuensis**, 137
Lonicera canadensis, 34, 38
Lumnitzera coccinea, 271; racemosa, 271
Lupinus affinis, 192; arenicola, 1, 2; brevicaulis, 11; Bridgesii, 1, 2, 20; densiflorus, 1–7, 167, 172, 174; densiflorus **altus**, 172, 185; densiflorus **austrocollium**, 173, 200; densiflorus **barbatissimus**, 173, 199; densiflorus **crinitus**, 173, 195; densiflorus **curvicarinus**, 173, 196; densiflorus **Dudleyi**, 173, 188, 189; densiflorus **glareosus** 172, 180; densiflorus **lacteus**, 172, 181; densiflorus **latilabrus**, 172, 178; densiflorus **latidens**, 173, 188; densiflorus **Menziesii**, 172, 176; densiflorus **McGregori**, 172, 184; densiflorus **palustris**, 173, 176, 191; densiflorus **perfistulosus**, 172, 175; densiflorus **persecundus**, 173, 190; densiflorus **Reedii**, 173, 197; densiflorus **scopulorum**, 173, 201; densiflorus **stanfordianus**, 173, 194; densiflorus **stenopetalus**, 172, 174; densiflorus **sublanatus**, 172, 183; densiflorus **Tracyi**, 172, 179; densiflorus **trichocalyx**, 173, 198; densiflorus **vastiticola**, 172, 186; densiflorus **versabilis**, 173, 187; glareosus, 1, 5, 14; horizontalis, 1, 5, 7, 11; horizontalis **platypetalus**, 12; lacteus, 1, 170; luteolus, 1–7, 20, 21; malacophyllus, 1, 2, 7; Menziesii, 1, 3, 170; Menziesii aurea, 1; microcarpus, 1–9, 200; microcarpus **ruber**, 10; palustris, 1; ruber, 1, 10; subvexus, 1, 5, 7, 12, 13, 193; subvexus **albilanatus**, 13, 19; subvexus **fluviatilis**, 6, 13, 14; subvexus **insularis**, 13, 17; subvexus **Leibergii**, 13, 16; subvexus **nigrescens**, 13; subvexus **phoeniceus**, 13, 17; subvexus **transmontanus**, 8, 13, 15; subvexus **Wilkesii**, 13, 20
Lupinus, Studies in the genus—II, 1; —III, 167
Lycium sandwicense, 274
Lycoperdon subcordatum, 454
Lycopersicum peruvianum, 270
Lycopodium annotinum, 39, 207; complanatum, 366; lucidulum, 207; obscurum, 366; obscurum dendroideum, 207; tristachyum, 366
Lysimachia spathulata, 275, 495; terrestris, 39
Lythrum maritimum, 276

MacCaughey, V. The strand flora of the Hawaiian Archipelago—I. Geographical relations, origin, and composition, 259;—II. Ecological relations, 483
Malvastrum tricuspidatum, 276
Matonia pectinata, 283
Medeola virginiana, 373
Menyanthes trifoliata, 40
Merulius affinis, 456; auricula, 456
Mesembryanthemum spp., 277
Metrosideros polymorpha, 276, 495; rugosa, 138
Michigan, The plant population of northern lower, 23
Mirabilis Jalapa, 56, 65
Mitchella repens, 39
Mitella nuda, 40
Morchella esculenta, 79, 80; hybrida, 79
Morinda, 271; citrifolia, 270, 271, 276
Mozinna spathulata, 152
Mucuna gigantea, 271, 272, 276; urens, 272
Myoporum sandwicense, 275
Myriadoporus adustus, 463
Myrica carolinensis, 375; Gale, 38, 374
Myriophyllum prosperinacoides, 482

Nama sandwicensis, 276, 495, 496, 500
Naias flexilis, 368; guadalupensis, 368
Naumburgia thyrsiflora, 40
Nemopanthes mucronata, 38
Nephrodium hirtipes, 98; molle, 94; pseudo-mas polydactylum, 98
New species of Hawaiian plants, 133
New species of Uredineae—X, 141
Nicotiana glauca, 220; glutinosa, 270; Tabacum, 219, 220, 221
Nigella damascena nana, 56, 65
Nipa fruticans, 270
Nishimura, M. A carrier of the mosaic disease, 219
Notes on plants of the southern United States—IV, 477
Notes on the fern genus Clathropteris, 279
Notholaena distans, 96; Eckloniana, 96; sinuata, 96
Nothoscordium, 149
Notoptera hirsuta, 149
Nototrichium humile, 274
Nymphaea alba, 52; variegata, 28, 39

Oenothera gigas, 53, 54, 58; Lamarckiana, 53, 54, 58

On the constancy of cell shape in leaves of varying shape, 51
Oncomyces mesentericus, 455
Onoclea sensibilis, 39
Ophioglossum vulgatum, 276, 365
Opuntia, 271· discata, 353; versicolor, 353
Oryzopsis asperifolia, 40
Osmunda cinnamomea, 94; Claytoniana, 94, 365; regalis, 94, 39, 103, 104; spectabilis, 365
Ostrya virginiana, 37
Oxycoccus macrocarpus, 40

Pandanus odoratissimus, 276
Pangium edule, 270
Panicularia acutiflora, 370; americana, 370; grandis, 370; pallida, 370; pallida Fernaldii, 370
Panicum Addisonii, 368; Bicknellii, 369; depauperatum, 40, 368, 369; dichotomum, 369; linearifolium, 368; meridionale, 369; Owenae, 368, 369; sanguineum, 56; tennesseense, 369
Pariera, 270
Pastinaca sativa, 39
Pellaea adiantoides, 96, 99; atropurpurea, 96, 99, 102; atropurpurea cristata, 96; cretica, 99; flavens, 96; nivea, 96; tenera, 96; viridis, 99
Pemphis acidula, 270, 271
PENNELL, F. W. Notes on plants of the southern United States—IV, 477
Pentstemon procerus, 143
Persicaria pensylvanica, 378
PETRY, L. C. Studies on the vegetation of New York State—II. The vegetation of a glacial plunge basin and its relation to temperature, 203
Petunia violacea, 219
Peucedanum sandwicense, 276
Peziza auricula, 456; coronaria, 84; coronaria macrocalyx, 85; Stevensoniana, 84; vesiculosa, 84
Phalaris arundinacea, 40
Phaseolus vulgaris, 56
Phaseolus vulgaris, Correlation of morphological variations in the seedling of, 109
Phegopteris Dryopteris, 207
Phegopteris polypodioides, Regeneration in, 391
Philippine Basidiomycetes—III, 451
Phlebia mesenterica, 455; reflexa, 456; rugosissima, 456
Phleum pratense, 40
Phragmidium Rosarum, 455; Rosae pimpinellifoliae, 455; subcorticium, 454
Phyllostegia variabilis, 274, 500
Physalacria orinocensis, 462
Physalis Alkekengi, 220, 231
Phytolacca decandra, 155
Picea canadensis, 37, 42; mariana, 28, 37, 42
Pinus Banksiana, 33, 37, 42; insularis, 464; resinosa, 37, 42; rigida, 366; Strobus, 37, 42; sylvestris, 51
Pisum sativum, 56, 65
Plant population of northern lower Michigan and its environment, The, 23
Plantago lanceolata, 59, 68; major, 59, 68; tomentosa, 270
Platycarpos, 1
Pleurotus flabellatus, 451
Poa pratensis, 38, 370
Polygonatum biflorum, 40, 373
Polygonum alpinum, 142; barbatum, 452; chinense, 452; maritimum, 378; pensylvanicum laevigatum, 378; pensylvanicum nesophilum, 378
Polypogon littoralis, 275, 497
Polyporus adustus, 463; albomarginatus, 464; atypus, 463; benguetensis, 464; Burtii, 463; carneus, 466; carpinus, 463; cinereo-fuscus, 465; crispus, 463; dolosus, 466; Elmeri, 468; flavus, 463; Halesiae, 463; incarnatus, 466; kermes, 464; laeticolor, 464; Lindheimeri, 463; luzonensis, 464; melanoporus, 465; ochrocroceus, 464; pallescens, 463; roseus, 466; rufo-pallidus, 466; spadiceus, 467; subcinereus, 463; tabacinus, 467
Polyporeae, 463
Polystictus abietinus, 466; atypus, 464; barbatus, 467; benguetensis, 464; cervino-gilvus, 463; microcyclus, 467; perpusillus, 466; rubritinctus, 466; spadiceus, 467; substygius, 467; tabacinus, 467; tabacinus **barbatus**, 467; tabacinus **substygius**, 467; xerampelinus, 467
Pongamia glabra, 270
Populus balsamifera, 37; grandidentata, 33, 37; tremuloides, 33, 37
Portulaca oleracea, 277, 500
Potamogeton Oakesianus, 367; pectinatus, 367; pulcher, 367
Potentilla Anserina, 33, 39
Primula sinensis, 55
Pritchardia Gaudichaudii, 500; spp., 276
Prosopis juliflora, 276, 489
Prunus maritima, 381; pennsylvanica, 33, 37; pumila, 33
Pteris aquilina, 38, 94; argyraea, 97, 102; cretica albolineata, 96, 97, 101, 102; Droogmantiana, 96; Parkeri, 97; quadriaurita argyraea, 96; serrulata, 94, 97; sulcata, 96, 97, 102
Puccineae, 454
Puccinia **adducta**, 148; Agropyri, 146; Ciberti, 454; cohaesa, 146; Eriophori, 144; **Heliconiae**, 144; Hyptidis, 454;

incondita, 148; **missouriensis**, 146; **Notopterae**, 149; **obesispora**, 147; patruelis, 150; **Rosenii**, 144; **Viornae**, 145; **wyomensis**, 143; Rivinae, 155
Puccinellia distans, 371; distans tenuis, 371
Pustularia gigantea, 82, 84; vesiculosa, 84
Pyrola asarifolia, 207
Pyropolyporus albomarginatus, 465; Merrillii, 465

Quercus alba, 31, 37, 42; alba x rufescens, 377; bicolor, 378; borealis maxima, 37, 42; coccinea, 375; coccinea x velutina, 378; ilicifolia, 376; ilicifolia x velutina, 377; pagodaefolia, 376; palustris, 378; prinoides rufescens, 376; **rufescens**, 376; stellata, 376; velutina, 40, 375

Radicula palustris, 380
Raimannia Drummondii, 482
Ranunculus recurvatus, 147; repens, 379
Razoumofskya pusilla, 28
Reana luxurians, 318
Regeneration in Phegopteris polypodioides, 391
Relationship between the number of sporophylls and the number of stamens and pistils—a criticism, The, 343
Reseda lutea, 380
Revision of the North American species of Encalypta, 433
Rhachicallis, 271
Rhamnus alnifolia, 34, 38
Rhexia Alifanus, 482; aristosa, 482; cubensis, 481; delicatula, 481; **interior**, 480, 482; lanceolata, 484; latifolia, 480; lutea, 480, 481; mariana, 481; Nashii, 480, 482; parviflora, 481; petiolata, 481; serrulata, 481; stricta, 482; virginica, 482
Rhizomopteris cruciata, 281
Rhizophora, 271
Rhus, 271; glabra, 38, 42; sp., 38: Toxicodendron, 33, 38, 42
Ribes lacustre, 207, 209
Riccia fluitans, 243; Frostii, 243, 244; glauca, 245; natans, 243
Ricciocarpus natans, 243
Ricinus communis, 271
ROCK, J. F. New species of Hawaiian plants, 133
Roestelia transformans, 287
Rollandia **angustifolia**, 136; longiflora, 137
Rosa cinnamomea, 380; sp., 33, 38
Rubus allegheniensis, 38, 42; odoratus, 207; strigosus, 38, 42; triflorus, 39
Rumex crispus, 378; elongatus, 378; maritimus fueginus, 378; persicarioides, 378
Ruppia maritima, 271, 275, 367, 497
Rynchospora aurea, 453; glauca, 453

Sabbatia campanulata, 383; stellaris, 383
Sagus, 271
Salix Bebbiana x cinerea, 374; discolor, 38; fluviatilis, 37; lucida, 37; pedicellaris, 34; petiolaris, 374; rostrata, 38; Smithiana, 374; spp., 37
Sagittaria Engelmanniana, 368; latifolia, 368
Salsola Kali, 492
Salvia occidentalis, 277
Samanea Saman, 277
Sambucus pubens, 34, 38
Santalum Freycenetianum littorale, 274, 487, 489, 500
Sapindus Saponaria, 271
Sassafras Sassafras, 380
Scaevola, 271; coriacea, 274; Koenigii, 271, 272; Lobelia, 275, 500; Plumieri, 270
Schiedea globosa, 274, 495; Lydgatei, 274, 495
Schoenus nigricans, 144
Scirpus americanus, 39; 144, atrovirens, 40; cyperinus pelius, 39; maritimus, 275; validus, 39, 372
Scolopendrium vulgare, 203
Scyphiphora hydrophyllacea, 271
Sepultaria sepulta, 84
Sesbania tomentosa, 275
Sesuvium, 271; Portulacastrum, 275, 496, 489, 500
Setiscapella subulata, 383
Sicyos hispidus, 276, 495, 500; microcarpus, 276, 500
Sida spp., 495
Silene noctiflora, A striking variation in, 157
Sistotrema violaceum, 466
Smilax herbacea, 373
SMITH, C. P. Studies in the genus Lupinus—II. The Microcarpi, exclusive of Lupinus densiflorus, 1;—III. Lupinus densiflorus, 167
Solanum aculeatissimum, 219, 221–231; carolinense, 219; laysanense, 274, 500; Nelsoni, 274; nigrum, 219; racemosum, 148; triquetrum, 148; tuberosum, 56
Solidago, 271; canadensis, 38
Sonneratia sp., 271
Sophora tomentosa, 271
Sparganium americanum, 367; eurycarpum, 367
Spartina Michauxiana, 39, 271
Spathularia, 79
Spiraea latifolia, 38
Spongipellis luzonensis, 464
Sporobolus, 271; argutus, 155; virginicus, 275, 489, 500; virginicus phleoides, 274

STEIL, W. N. Studies of some new cases of apogamy in ferns, 93
Stereum adustum, 457; bellum, 458; cacao, 458; concolor, 459; contrarium, 460; crenatum, 459; involutum, 459; lobatum, 459; lugubre, 459; luzoniense, 460, 461; nigricans, 458; ostrea, 459; ostrea concolor, 459; perlatum, 459, 460; princeps, 460; radio-fissum, 460; rheicolor, 458; scytale, 460; spectabile, 460; tenuissimum, 458
Stevia sp., 154
Stipa avenacea, 369
Strand flora of the Hawaiian Archipelago, The,—I. Geographical relations, origin, and composition, 259;—II., Ecological relations, 483
Straussia **glomerata** 138; hawaiiensis, 134, 139
Striking variation in Silene noctiflora, A, 157
Streptopus roseus, 207
Strongylodon, lucidum, 134, 271, 272
Studies in the genus Gymnosporangium —II., Report on cultures made in 1915 and 1916, 287
Studies in the genus Lupinus—II. The Microcarpi, exclusive of Lupinus densiflorus, 1;—III. Lupinus densiflorus, 167
Studies of some new cases of apogamy in ferns, 93
Studies on the vegetation of New York state—II. The vegetation of a glacial plunge basin and its relation to temperature, 203
Suriana maritima, 270 271
Stenotaphrum, 271

Tacca pinnatifida, 271
Targionia hypophylla, 244, 246
Taxonomy and distribution of Adenostegia, 399
Taxus canadensis, 38, 42
TENOPYR, L. A. On the constancy of cell shape in leaves of varying shape, 51
Tephrosia littoralis, 270; piscatoria, 275
Terminalia Katappa, 271
Tetramolopium sp., 495, 496
Thalictrum dasycarpum, 39; polygamum, 380
Thelephora adusta, 457; atro-caerulea, 457; caerulea, 457; concolor, 459; fimbriata, 457; indigo, 457; lobata, 459; mesenterica, 455; nigricans, 458; purpurea, 455; pavonia, 462; princeps, 460
Thelephoreae, 457
Thenardia Galeottiana, 150
Thespesia populnea, 270, 271, 497
Thuja occidentalis, 37
Thymus serpyllum, 383
Tiarella cordifolia, 207
Tilia americana, 37
Tilletia destruens, 452; Oryzae, 453
Tithymalus commutata, 151; leiococcus, 151; missouriensis, 151; robusta, 151
Tournefortia argentea, 270, 271
Tradescantia virginiana, 373
Trametes aurora, 463; Elmeri, 468; insularis, 468
Tranzschelia cohaesa, 146
Trematolobelia macrostachys, 138
Tremella caragana, 456; auricula, 456; auriformis, 456
Triadenum virginicum, 39
Tribulus cistoides, 270, 276, 495, 500
Trientalis americana, 39
Trifolium pratense, 40; repens, 40
Triglochin maritima, 368
Trillium grandiflorum, 40
Tripsacum dactyloides, 323
Tsuga canadensis, 37
Typha angustifolia, 366; latifolia, 29, 38, 367
Tyromyces Elmeri, 468
Two remarkable Discomycetes, 77

Ulmus americana, 37, 42
Underwoodia columnaris, 77
Unifolium canadense, 38
Uredo carbo, 452; Ciberti, 454; destruens, 452; **egenula,** 155; Eglanteriae, 455; elevata, 454; Heliconiae, 144; Hyptidis, 454; miniata Eglanteriae, 454; **panamensis,** 155; tonkinensis, 453; **unilateralis,** 155
Uromyces Acetosae, 143; **Atriplicis,** 141; **fuscatus,** 142, **Krameriae,** 143
Urtica dioica, 56
Ustilagineae, 452
Ustilago Adropogonis-aciculati, 452; carbo destruens, 452; destruens, 453; emodensis, 452; Koordersiana, 452; leucoderma, 453; Panici miliacei, 452; tonkinensis, 453; virens, 453
Ustilaginoidea Oryzae, 453; virens, 453

Vaccinium canadense, 38; pennsylvanicum, 38
Vagnera racemosa, 31, 39; stellata, 373; trifolia, 39
Verbascum Thapsus, 39
Verbena littoralis, 270; polystacha, 270
Verpa digitaliformis, 79
Vibrissea, 79
Viburnum acerifolium, 31, 38; cassinoides, 38; venosum, 383
Victoria regia, 52
Vigna, 271; lutea, 270, 272, 276; oahuensis, 270
Vitex trifolia, 272

Vitis vinifera, 52, 271; vulpina, 38

Waltheria americana, 276, 497
Washingtonia Claytoni, 39
WEATHERWAX, P. The evolution of maize, 309
Wikstroemia Uva-ursi, 274, 496
Wollastonia glabra, 270, 271
Wound periderm in certain cacti, 353

Xanthium echinatum, 277
Ximemia americana, 271

Zanichellia palustris, 368
Zea canina, 309, 329; Mays, 56, 312
Zostera, 271